

Work Order ID 71132

Thursday, June 23, 2011 11:07:30 AM



Page 1

Item ID: D205-634-041

Accept



Setup Start



Revision ID:

Stop



Item Name: Replacement Skidtube

Start Date: 6/23/2011 Start Qty: 1.00



Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Approvals:

Process Plan:

CL

Date: 11/06/23

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2580-041

Rev.D DEO-D1

100

0.00



DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy D205-634 bluefile & type labels per PPP D205-634-041 CHG004

CHG002

N/A HJ

110

0.00



BENDING MACHINE - SKIDTUBES

CNC Bend I

Memo

0.00

CNC Delta 100 Bender

1-Bend as per program D2580.C on CNC Bender and Folio 16

BE 11/07/05

2-Cut tubes as per Dwg. D2580

B 11/07/05

3- scribe batch# in aft end of tube

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120		0.00							
Skidtubes	Memo	0.00							
Skidtubes	1- Deburr ends and remove bending marks								
	2- Prepare tube for swaging as per QSI 002								
	<i>welding</i>								
130	QC5- Inspect part completeness to step on W/O	0.00							
QC	Memo	0.00							
Quality Control									

Subtotal



JB 11/07/06

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

140

0.00



Skidtubes

Memo

0.00

Skidtubes

1-Weld step D2576 as per Dwg. D2580 and QSI004
A/R□□□ Aluminum Rod

M117456 BE 11/07/06

2-Grind welds on step as per Dwg D2580

3-Insert D4202-1 spacer, swage as per QSI002 and trim/ grind flush per QSI002
and dwg. Hold x-bolt with DT9701 Use tube expander 1/2 x 17G to start
expansion and finish with 1/2 x 18G to achieve dwg dimension.4-Drill holes for wearplates using DT 8217 & DT8937 Open holes to 19/64",
adjust stopper not to hit web. Debur

6-Drill pilot holes for aft cap using DT 8215 Open holes to 0.208". Debur

7-Drill pilot holes for Tow ring using DT8091, open to .640" and Debur

C-Bore holes for x-bolt spacer > DP 11-7-7

B 11/07/07

150

QC10- Inspect visual per QSI004- ground welds

0.00



QC

Memo

0.00

Quality Control

S. Mestor

(74)

W/O:		WORK ORDER CHANGES					
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Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

160

QC5- Inspect part completeness to step on W/O

0.00



QC

Memo

0.00

Quality Control

8/11/07

170

Pressure Wash per QSI005 4.3

0.00



HandFinish

Memo

0.00

Hand Finishing

Re-alodine tube as per QSI 005 section 4.1.2.1 do not acid etch and leave fwd cap out of solution.

1 11-7-8

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00



Powdercoat

Memo

0.00

Powder Coating

START TIME:
OVEN TEMPERATURE:
FINISH TIME:

8:00
320 OF
8:30

1X 0 AM 11/07/11

M 117745

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC3- Inspect Part Finish

0.00



QC

Memo

0.00

Quality Control

1 0 11/07/12

W/O:		WORK ORDER CHANGES					
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start



Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

200

0.00



HandFinish

Hand Finishing

Memo

0.00

1-Install inserts & wearplates & Gaskets as per Dwg. D2580. Use a drop of

Sikaflex on insert holes before installing wearplates

A/R ☐ ☐ ☐ Sikaflex-291 ☐ M117501

Sikaflex expire date: 12/01

2-Coat D2594-3 O' rings with Petroleum Jelly and install on D2594-1 plugs as per Dwg D2580

3-Inspect for foreign object per QSI 024

4-Install 2855 Aft Cap as per Dwg D2580 and seal Fwd Step & Aft Cap with

Sikaflex. Clean excess adhesive

A/R ☐ ☐ ☐ Sikaflex-291 ☐ M117501

Sikaflex expire date: 12/01

5-Wing Walk as per Dwg D2580 and QSI 005 4.4

Batch: M117863

1 0 11 u/o = 12

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Cust Item ID:

Required Date: 7/5/2011 Req'd Qty: 1.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

210



QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

Memo

0.00

S. W. 1/2



Inspect Aft Cap, Fwd Step and Wing Walk of work to Current Step Inspect for Foreign objects per QSI 024

220



Packaging

Packaging

Packaging

0.00

Memo

0.00

Identify and pack for shipping as per PPPD205-634-041

Location:

PPP Rev:

PPPD 11/31

Per 11/7/21

230



QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

11/7/21
ME
11-07-21

W/O:		WORK ORDER CHANGES					
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Picklist Print

Thursday, June 23, 2011 11:07:26 AM

Page 1

Work Order ID: 71132

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube



Start Date: 6/23/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:N 02.08.28 FP was QC5 in Step 27; Added QC5 to Step 30
 KJ IPP Rev P 10.02.19
 per PAR09-043 EC verified by:DD
 IPP Rev. O 06.02.28 Added paperwork EC
 IPP Rev:P 07-07-09 SS Wearplates & Gaskets JLM IPP Rev:Q
 10.12.01 as per chg003 DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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D4202-1		Manufactured	No			140	Each	443.0000	20	20			
---------	--	--------------	----	--	--	-----	------	----------	----	----	--	--	--



Spacer

D2579-1

Location	Loc Qty	Loc Code
LG002	443	
66929	106	
67129	196	
67308	1	
67430	140	

BE 11/07/06
 B 70761 x20

D2580-1		Manufactured	No			110	Each	7.0000	1	1			
---------	--	--------------	----	--	--	-----	------	--------	---	---	--	--	--



205 Skidtube bent detail

Location	Loc Qty	Loc Code
LG	5	
69731	1	
70260	2	
70784	2	
ST046	2	
70785	2	

BE 11/07/05

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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Page 2

Work Order ID: 71132

Parent Item: D205-634-041

Parent Item Name: Replacement Skidtube

Start Date: 6/23/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

D2576-3 Manufactured No

140 Each

48.0000

1

1



Step (maching detail)

Location

Loc Qty

Loc Code

LG

48

66156

48

D2855 Manufactured No

200 Each

47.0000

1

1



Cap

Location

Loc Qty

Loc Code

FP007

47

53791

10

65519

2

65569

35

AN3-5A Purchased No

200 Each

1,097.000

2

2



Bolt

Location

Loc Qty

Loc Code

ST350

1097

115371

297

117423

800

AN960JD10L NAS1149D0332I Purchased No

200 Each

0.0000

2

2



Washer

ALS7-1032-130 Purchased No

200 Each

1,485.000

50

50



Insert

Location

Loc Qty

Loc Code

ST282

1485

117717

1485

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Shop Packet Print

Page 2

W/O:		WORK ORDER CHANGES					
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Page 3

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Parent Item Name: Replacement Skidtube

Start Date: 6/23/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

AN3C4A Purchased No 200 Each 2,502.000 50 50
BOLT

Location	Loc Qty	Loc Code
ST350	2502	
117094	8	
117313	2	
117688	800	
117795	500	
117872	192	
118012	500	
118112	500	

AN960C10L NAS1149C0332 Purchased No 200 Each 0.0000 50 50



washer

D3566-13 Manufactured No 200 Each 32.0000 1 1



Gasket

Location	Loc Qty	Loc Code
FP	26	
69281	26	
FP014	6	
68341	6	

D3566-5 Manufactured No 200 Each 22.0000 1 1



Gasket

Location	Loc Qty	Loc Code
FP015	22	
68961	22	

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Shop Packet Print

Page 3

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Start Date: 6/23/2011

Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

D3566-1

 Gasket

Manufactured No

200 Each

20.0000 2 2



HL 11/07/12

Location

Loc Qty

Loc Code

FP015

20

370769

68924

2

x2

69279

18

D3564-11

 Wearshoe

Manufactured No

200 Each

4.0000 1 1



HL 11/07/12

Location

Loc Qty

Loc Code

FP019

4

367591

69119

4

x1

D3564-13

 Wearshoe

Manufactured No

200 Each

20.0000 1 1



HL 11/07/12

Location

Loc Qty

Loc Code

FP016

18

69280

18

x1

FP017

2

66805

2

D3564-9

 Wearshoe

Manufactured No

200 Each

9.0000 1 1



HL 11/07/12

Location

Loc Qty

Loc Code

FP019

9

67590

4

68349

5

x1

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Required Date: 7/5/2011

Start Qty: 1.00

Required Qty: 1.00

D3564-5

Manufactured No

200

Each

30.0000

1

1



Wearshoe



22 11/07/12

Location

Loc Qty

Loc Code

FG

2

34806

2

FP019

28

68960

6

70864

22

D2594-3

Manufactured No

200

Each

876.0000

16

16



O-Ring, 205 Skidtube



22 11/07/12

Location

Loc Qty

Loc Code

FP-A

876

65518

54

66952

822

D2594-1

Manufactured No

200

Each

329.0000

16

16



Plug, 205 Skidtube



22 11/07/12

Location

Loc Qty

Loc Code

FP-A

329

42807

28

66932

10

67441

7

68943

284

22 11/07/12

W/O:		WORK ORDER CHANGES					
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DART

DESIGN <i>[Signature]</i>	DRAWN BY <i>[Signature]</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2580	REV. D SHEET 1 OF 3
DATE 07.02.27		TITLE 205 SKIDTUBE ASSEMBLY	SCALE NTS
A	96.09.16	NEW ISSUE	
B	96.12.02	AS MANUFACTURED	
C	98.08.26	REDRAWN, INCLUDED DEO 9094/9097	
D	07.02.27	CHANGE TO SS WEARPLATES AND GASKETS, INCLUDE DEO 9124/9183	

RELEASED
07.06.28 #**DEO ATTACHED**

QTY -041	QTY -045	Part Number	Description
X		D2580-041	SKIDTUBE ASSEMBLY
	X	D2580-045	SKIDTUBE ASSEMBLY
1	1	D2500-1-190	EXTRUSION
1	1	D2576-3	STEP
20	24	D2579	CROSS BOLT SPACER
16	16	D2594-1	PLUG
16	16	D2594-3	O-RING
1	1	D2596	205 WEB
1	1	D2855	AFT CAP
1	1	D3564-5	WEARSHOE
1	1	D3564-9	WEARSHOE
1	1	D3564-11	WEARSHOE
1	1	D3564-13	WEARSHOE
2	2	D3566-1	GASKET
1	1	D3566-5	GASKET
1	1	D3566-13	GASKET
50	50	ALS7-1032-130 or AKS7-1032-130 or AKS4-1032-130 or AELS-1032-130	INSERT
50	50	AN3C4A	BOLT
2	2	AN3-5A	BOLT
50	50	AN960C10L	WASHER
2	2	AN960JD10L	WASHER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 71132

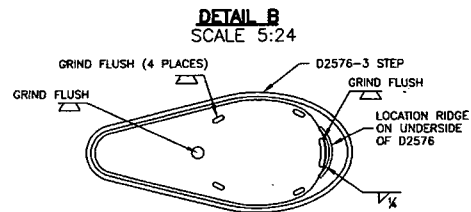
GENERAL NOTES:

- 1) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 2) ALL DIMENSIONS ARE IN INCHES
- 3) INSERT D2596 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH NON-STRUCTURAL SIKAFLEX-241 ADHESIVE PER DART QSI 015 BEFORE BENDING. ENSURE HOLES LINE-UP.
- 4) BEND AS A SMOOTH RADIUS STARTING WITH A MAXIMUM CENTERLINE RADIUS OF 60 AND ENDING WITH A MINIMUM RADIUS OF 30. A MAXIMUM REDUCTION OF 0.200 IN DIAMETER IS ALLOWABLE IN THE BENT PORTION OF THE TUBE.
- 5) USE DART DRILL TEMPLATE TD2577-205 TO LOCATE AND DRILL Ø0.297 HOLES FOR WEARSHOE INSERTS. INSTALL ALS7-1032-130 PER SECTION D-D (50 PLACES) AFTER FINISH. INSTALL AN3C4A BOLTS AND AN960C10L WASHERS WITH SIKAFLEX-241/-291.
- 6) WELDING TO BE DONE PER DART QSI 004.
- 7) FINISH:
SEE NOTES ON
PAGE 2 FOR D2580-041 AND
PAGE 3 FOR D2580-045
- 8) INSERT D2594-1 PLUG C/W D2594-3 O-RING IN HOLES MARKED 'P' (BOTH SIDES OF TUBE) AFTER FINISH (16 PLACES).

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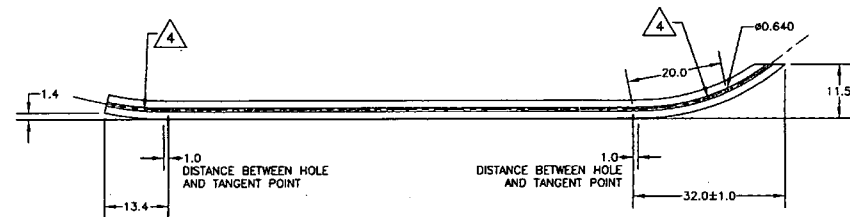
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D2580-1 DRILLING DETAIL

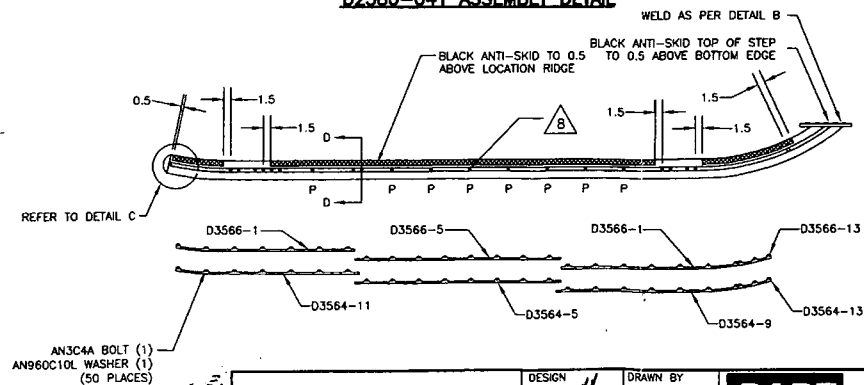


DEO ATTACHED

D2580-1 BENDING AND CUTTING DETAIL



D2580-041 ASSEMBLY DETAIL



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- | | | | |
|----------|----------|-----------------------|--|
| DESIGN | DRAWN BY | DART | DART AEROSPACE LTD.
MARKHAM, ONTARIO, CANADA |
| CHECKED | APPROVED | | |
| DATE | | D2580 | SHEET 2 OF 3 |
| 07.02.27 | | TITLE | SCALE |
| | | 205 SKIDTUBE ASSEMBLY | 1:24 |

RELEASED
07-16-28

Diagram illustrating the grinding locations and features on the propeller cross-section:

- GRIND FLUSH (4 PLACES)
- GRIND FLUSH
- D2576-3 STEP
- GRIND FLUSH
- LOCATION RIDGE ON UNDERSIDE OF D2576
- $\frac{1}{16}$

DETAIL G
SCALE 5:24

Technical drawing of a bolted joint assembly. The drawing shows a circular flange with a central hole. A bolt is inserted through the center. The following components and dimensions are labeled:

- DRILL PRIOR TO D2855 CAP INSTALLATION (2 PLACES)
- SEAL WITH SIKAFLEX-241/-291
- AN3-5A BOLT (1)
- AN960JD10L WASHER (1) (2 PLACES)
- D2855 CAP
- SEE NOTE ii)
- 0.40

Diagram illustrating the components and inspection points for a wheel assembly:

- D2579 SPACER
- D2596 WEB (REF)
- ALS7-1032-130 (REF) (TYP 50 PLACES)
- AFTER PERFORM:
 1. CH
 2. INS
 3. WE
 4. C'B

AFTER DRILLING AND BENDING ASSEMBLY
 PERFORM THE FOLLOWING FOR #0.508 HOLES ONLY:
 1. CHAMFER HOLE 0.050 X 45°
 2. INSERT D2579 SPACER (20 PLACES)
 3. WELD INTO PLACE AND GRIND FLUSH
 4. C/BORE D2579 SPACER TO #0.437 X 1.00 DEEP

i) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1 PRIOR TO INSERTING D2596 WEB
POWDER COAT ENTIRE ASSEMBLY GREEN (REF. 4.3.5.8) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED PER DART QSI 005 4.4

ii) IT IS ACCEPTABLE TO GRIND A RELIEF IN THE D2855 AFT CAP TO PREVENT INTERFERENCE
WITH THE SPACER AT THIS LOCATION

37.50
DISTANCE TO AFT END
OF D2596 WEB
3 7
REFER TO DETAIL A
1.750 1.750
8.750
17.375
26.000
34.188
57.313 (REF)
7 EQUAL SPACES
8.188 PITCH
38.0 91.50 190.0
(D2500-1)
#0.508 (TYP.)
(40 PLACES)
REFER TO DETAIL E

(MAKE FROM D2580-1 DRILLING DETAIL)

51.340

39.580

5.815

20.0

0.640

0.508 (8 PLACES)

3.630 (REF)

5.338 (REF)

5.985

1.4

1.0

1.0

32.0 ± 1.0

13.4


4

4

DISTANCE BETWEEN HOLE AND TANGENT POINT

DISTANCE BETWEEN HOLE AND TANGENT POINT

[illegible]

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	CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>		
	DATE 07.02.27	TITLE 205 SKIDTUBE ASSEMBLY		

DRAWING NO. D2580	TITLE 205 SKIDTUBE ASSEMBLY	REV. D	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D2580-D-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN <i>UP</i>	CHECKED <i>1</i>	MFG. APPR. <i>EE</i>	APPROVED <i>MP</i>		DE APPR. <i>MP</i>		
DATE 10.09.22	DATE 10.11.04	DATE 10.11.04	DATE 10/11/04		DATE 10.11.04		

PURPOSE:

CHANGE ALL WELDED CROSSBOLT SPACERS TO SWAGED SPACERS

CHANGE:

PARTS LIST IS AMENDED AS FOLLOWS:

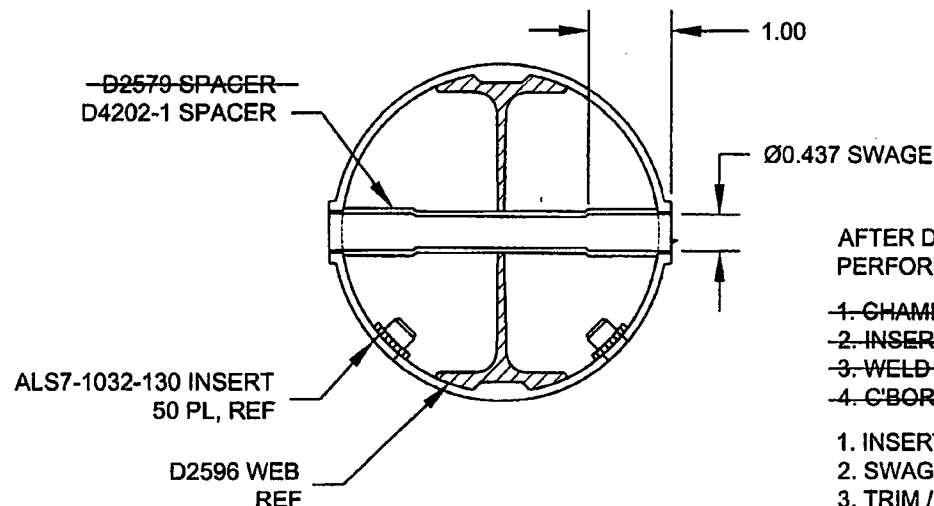
WAS

QTY	QTY	PART NUMBER	DESCRIPTION
-041	-045		
20	24	D2579	CROSS BOLT SPACER

IS

20	24	D4202-1	SPACER
----	----	---------	--------

SECTION D-D & SECTION H-H ARE AMENDED AS FOLLOWS:



SECTION D-D
NOT TO SCALE

SECTION H-H
NOT TO SCALE

RELEASED
2010-11-18
MP

AFTER DRILLING AND BENDING ASSEMBLY
PERFORM THE FOLLOWING FOR Ø0.508 HOLES ONLY:

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2579 SPACER (20 PLACES)
3. WELD INTO PLACE AND GRIND FLUSH
4. C'BORE D2579 SPACER TO Ø0.437 X 1.00 DEEP

1. INSERT D4202-1 SPACER, 20 PL (-041) OR 24 PL (-045)
2. SWAGE TO Ø0.437 X 1.00 DEEP PER QSI 002
3. TRIM / GRIND FLUSH PER QSI 002

Linda Lacelle

From: dshepherd@dartaero.com
Sent: April 18, 2011 11:36 AM
To: Linda Lacelle; Mike Petsche
Cc: Bill Beckett; 'Chris Provencal'; 'Eric Charbonneau'
Subject: Re: Alum. Solution Anneal - swaging

Makes sense to me ... We don't want to get caught short ... Make sure that if we do this, they are ident. the old CHG number.

David

Sent from my BlackBerry device on the Rogers Wireless Network

From: "Linda Lacelle" <llacelle@dartaero.com>
Date: Mon, 18 Apr 2011 11:21:10 -0400
To: 'Mike Petsche' <mpetsche@dartaero.com>; <dshepherd@dartaero.com>
Cc: 'Bill Beckett' <bbeckett@dartaero.com>; 'Chris Provencal' <cprovencal@dartaero.com>; 'Eric Charbonneau' <echarbonneau@dartaero.com>
Subject: RE: Alum. Solution Anneal - swaging

I am ready to weld some up, I don't want to get into trouble with L/T's on these, any objections??
LL

From: Mike Petsche [mailto:mpetsche@dartaero.com]
Sent: April 18, 2011 10:42 AM
To: 'Linda Lacelle'; dshepherd@dartaero.com
Cc: 'Bill Beckett'; 'Chris Provencal'; 'Eric Charbonneau'
Subject: RE: Alum. Solution Anneal - swaging

Well I'm not sure what to say.

It is my understanding that the swaging will still make sense even with the extra hoops we need to jump through.

If there is still uncertainty on the delivery of the material, we CAN still weld them if we need to.

And while this might be less than "world class", couldn't we take some of our tubing that we have in stock and with the welder to knock down the temper a little? Ground clamp on one end, torch on the other.....BZZZZZZZ!

(I'm only sort of joking....because I bet it would work)

From: Linda Lacelle [mailto:llacelle@dartaero.com]
Sent: April 18, 2011 9:44 AM
To: dshepherd@dartaero.com; 'Mike Petsche'
Cc: Bill Beckett; Chris Provencal; Eric Charbonneau
Subject: RE: Alum. Solution Anneal - swaging
Importance: High

NO. 258

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name: Barclay Elliot
Job number: R69986
Part number: 2205-634-041
Description: 205
Welding Process: Tig[☒] Mig[]
Base material: Aluminum
Current: AC[☒] DC[]

TEST REQUIREMENTS AND RESULTS

Visual: pass[☒] fail[]
Penetration: pass[☒] fail[]

UNACCEPTABLE

Cracks: pass[☒] fail[]
Undercut: pass[☒] fail[]
Pin holes: pass[☒] fail[]
Overlap (cold lap): pass[☒] fail[]
Porosity (surface): pass[☒] fail[]
Coloration: pass[☒] fail[]

Qualifier Art Evans Date of Test Coupon 11.06.24
Welder Barclay Elliot Date of Test Coupon 11/06/24

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries